

## CLAIMS

What is claimed is:

1        1. A magnetic disk for a hard disk drive, comprising:  
2        a substrate;  
3        a S1 magnetic layer located over said substrate;  
4        a layer of ruthenium located over said S1 magnetic  
5 layer;

6        a layer of chromium located over said layer of  
7 ruthenium; and,

8        a top magnetic layer located adjacent to said layer of  
9 chromium.

10       2. The disk of claim 1, further comprising a S2  
11 magnetic layer located adjacent to said layer of chromium  
12 and said layer of ruthenium.

1       3. The disk of claim 1, further comprising an  
2 underlayer located between said substrate and said S1  
3 magnetic layer.

1       4. The disk of claim 1, further comprising an overcoat  
2 layer located over said top magnetic layer.

1           5.    The disk of claim 4, further comprising a layer of  
2 lubricant located over said overcoat layer.

1           6.    A hard disk drive, comprising:

2           a base plate;

3           a spindle motor coupled to said base plate;

4           a disk coupled to said spindle motor, said disk

5 including;

6               a substrate;

7               a S1 magnetic layer located over said substrate;

8               a layer of ruthenium located over said S1 magnetic  
9 layer;

10              a layer of chromium located over said layer of  
11 ruthenium;

12              a top magnetic layer located adjacent to said  
13 layer of ruthenium;

14              an actuator arm mounted to said base plate;

15              a voice coil motor coupled to said actuator arm;

16              a flexure arm coupled to said actuator arm; and,

17              a head coupled to said flexure arm and said disk.

1           7.     The hard disk drive of claim 6, further  
2 comprising a S2 magnetic layer located adjacent to said  
3 layer of chromium and said layer of ruthenium.

1           8.     The hard disk drive of claim 6, further  
2 comprising an underlayer located between said substrate and  
3 said S1 magnetic layer.

1           9.     The hard disk drive of claim 6, further comprising  
2 an overcoat layer located over said top magnetic layer.

1           10.    The hard disk drive of claim 9, further comprising  
2 a layer of lubricant located over said overcoat layer.

1           11.    A method for fabricating a disk of a hard disk  
2 drive, comprising:

3           forming a layer of S1 magnetic material over a  
4 substrate;

5           forming a layer of ruthenium over the layer of S1  
6 magnetic material;

7           forming a layer of chromium over the layer of  
8 ruthenium; and,

9 forming a top layer of magnetic material onto the layer  
10 of chromium.

1 12. The method of claim 11, further comprising forming  
2 a layer of S2 magnetic material between the layer of  
3 ruthenium and layer of chromium.

1 13. The method of claim 12, further comprising forming  
2 an underlayer between the substrate and the layer of S1  
3 magnetic material.

4 14. The method of claim 13, further comprising forming  
5 an overcoat layer onto the top layer of magnetic material.

6 15. The method of claim 14, further comprising forming  
7 a layer of lubricant onto the overcoat layer.